Referring to Figure 1, cable 10 includes an electrical conductive element 12 which is comprised of a metallic core 14 which is preferably 32 gage copper wire. The metallic core 14 is peripherally surrounded by a dielectric element 16 which is preferably 0.002"/0.003" MIL-ENE. The cable 10 also includes an optical conductive element 18. This optical conductive element 18 is comprised of a glass core 20 which is peripherally overlaid by an arcylate section 22 which is preferably 245 microns in thickness. A PTFE layer 24 which is preferably 0.003" in thickness peripherally overlays the arcylate section 22. A FEP section 26 peripherally overlays the PTFE section 24. The FEP section 26 preferably has an outside diameter of 600 microns. The cable 10 also includes a plurality of additional electrical conductive elements as at electrical conductive elements 28, 30, 32, and 34 which are essentially identical to electrical conductive element 12. Cable 10 also includes an outer peripheral jacket 36 which is comprised of Zylon.

Referring to Figure 2, in another embodiment of this invention cable 38 includes an electrical conductive element 40. This electrical conductive element 40 is comprised of a metallic core 42 which is peripherally surrounded by a PTFE layer 44 which is preferably 0.005" in thickness. A EKJ layer 46 peripherally overlays the PTFE layer 42 an is preferably from 0.003" to 0.006" in thickness. The cable 38 also includes an optical conductive element 48 which has glass core 50 which is peripherally overlaid by a polyimide section 52 which is preferably 152 microns in thickness which is itself peripherally overlaid by a PTFE layer 54 which is preferably 0.003" in thickness. The PTFE layer 54 is peripherally overlaid by a PFA and PEEK composite layer 56 which has a 600 micron outer diameter. In the PFA and PEEK composite layer 56 there is an inner layer of the softer PFA which is overlaid by a shell of the harder PEEK. The stiff PEEK shell provides crushing protection during